

4
EXHIBIT

DATE

3/20/15

3/20/2015

HB

Info

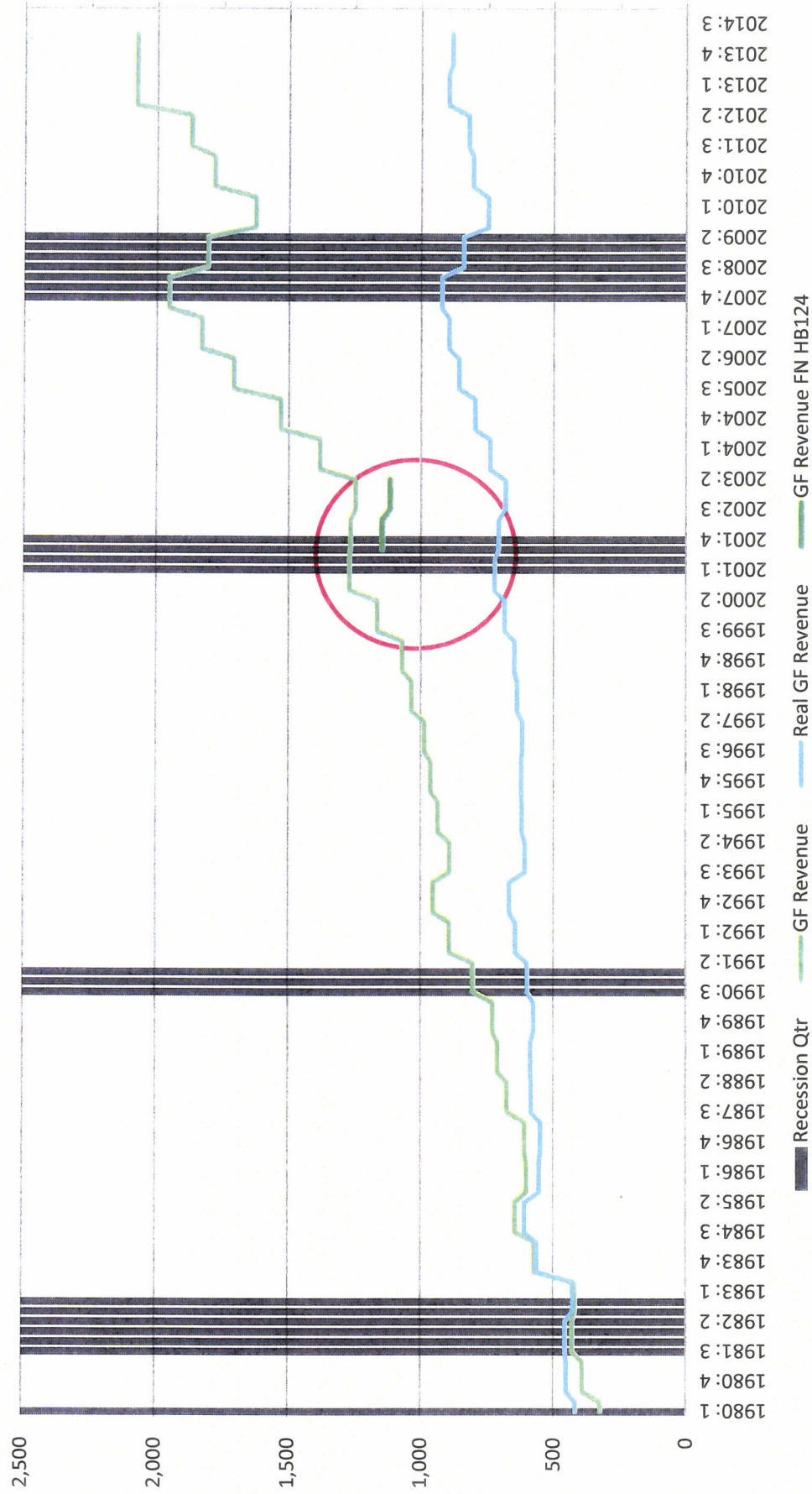
Legislative Fiscal Division Revenue Update

March 20, 2015

Probability

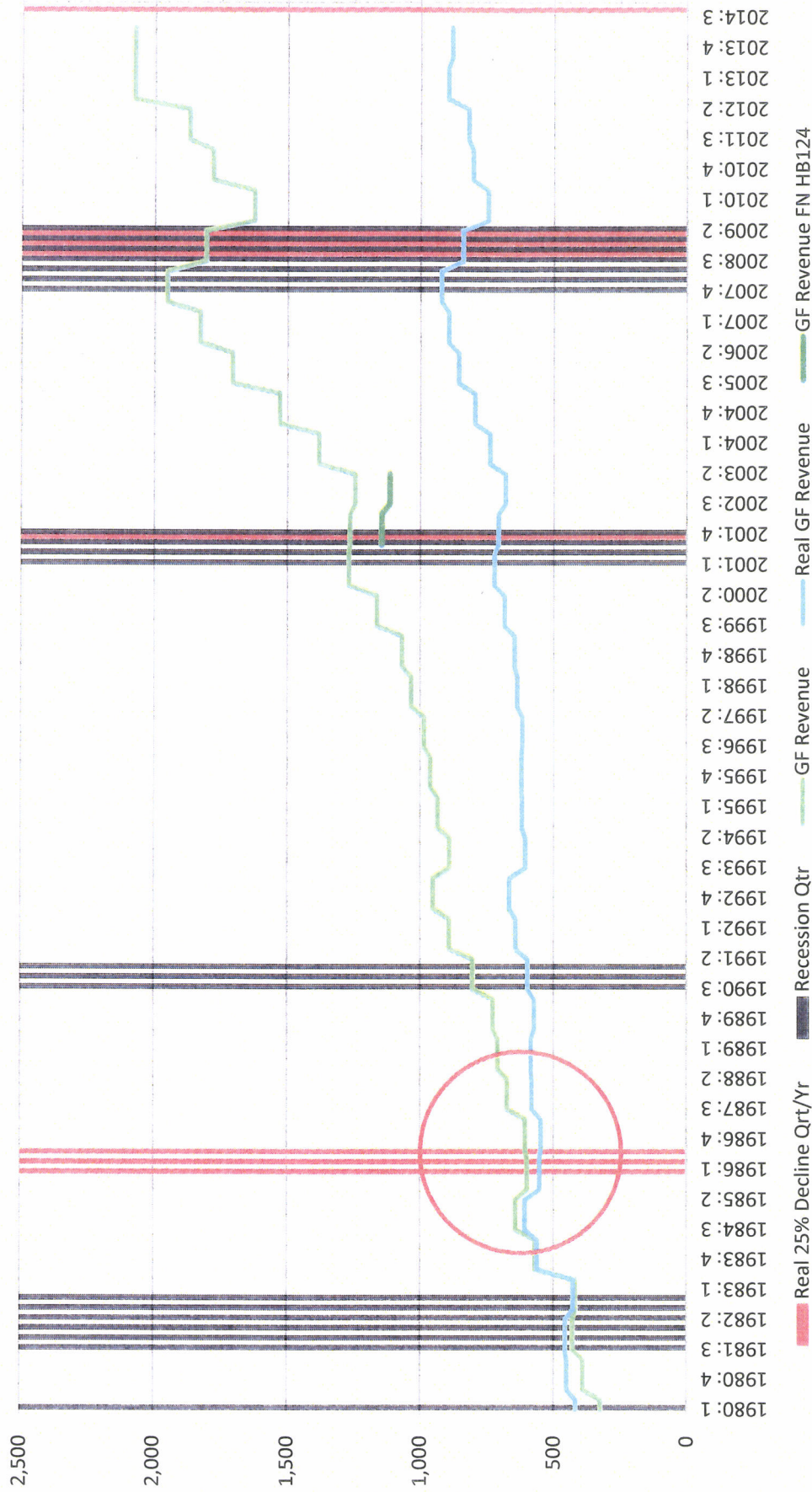
- Historic general fund reaction to oil price declines
- Data Types
 - Accounting data
 - Return data
 - Economic data
- LFD estimates

Quarters of Recession and General Fund Revenue



Note: FY 2002 would have shown material decline without the impacts of HB 124 which changed local government revenue streams into state revenue streams and then distributed these revenues through entitlement share and block grants.

Quarters of Recession, GF Revenue and Steep Oil Price Declines



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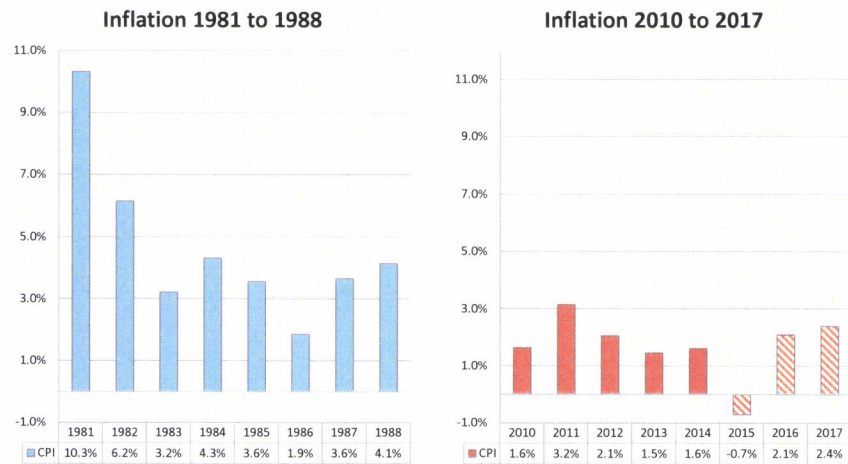
Recessions in General

- Delayed impact to general fund revenues
- Recessions do not always cause a drop in Montana general fund revenue

Mid-1980s

- No recession
- Price of oil decline sharpest in 1986, started prior to 1986
- OPEC collapse end of 1985
- Inflation drop and deflation in one year

Comparison of Inflation



Similarities to Present Day

- The current drop in price of oil appears similar given the economic forecasts
 - No recession
 - Price of oil decline
 - Inflation

Types of Data: Income & Corp

- **Accounting:** actual receipts and refunds – bound by accounting, not bound by economic timeframe
- **Returns:** information reported by taxpayers about what they owe for which types of income – somewhat bounded by an economic timeframe
- **Economic:** IHS Econometrics and other sources – bound by an economic timeframe

Models

Return Data

Data from historical **Returns**

Economic data trended Return data

Return data trends well with economic data

Conversion from Returns to Accounting

Accounting data has significant “noise” with **Return** data

CY 2014 / FY 2015 Income Tax Year to Date Analysis

Known data in conflict

- **Accounting data:**
 - YTD overall growth for first 8 months = 6.8%
 - Withholding growth 8.1%
- **Economic data:** Wages grew 3.7-4.5%

Unknown to bridge the gap

- **Accounting data FYE 2015:**
 - Taxpayer behavior
 - Refunds
 - Estimated taxes in last 2 Qtrs
 - Final audits
- **Return data November 2015:**
 - Actual business profits
 - Actual capital gains
 - Actual wages

Predictive Usefulness

Accounting

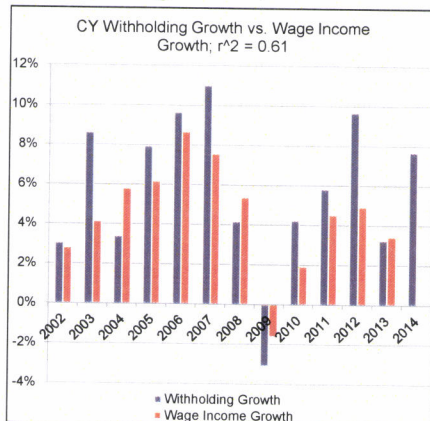
- Year to date
- Limited predictive power, i.e. current fiscal year
- **Applying economic trends to accounting data without considering actual liabilities adds risk as it build current taxpayer behavior in as ongoing**
- FY 2015 range: \$2,140 to \$2,220 million

Economic / Return

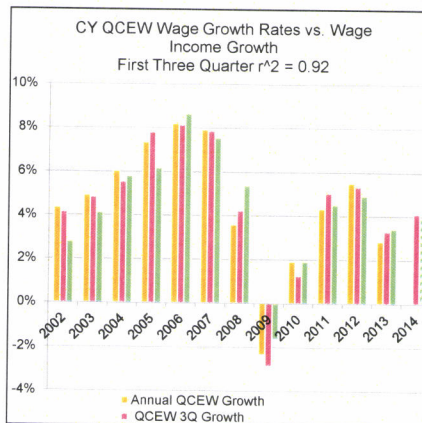
- Return data modeled from economic data
- Longer term predictability due to economic forecasts

Comparing Predictive Capabilities of Data Types

Accounting



Economic

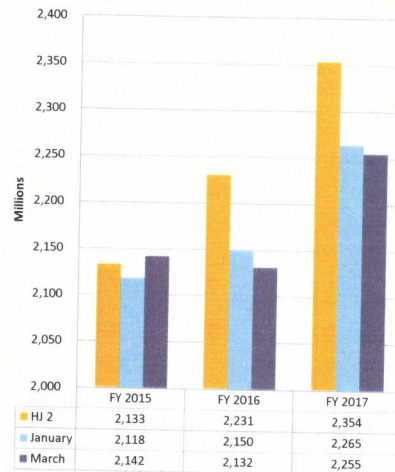


Probability

- Economic data correlates well to return data
- IHS Econometrics forecasts economic data
- Bias in corporation tax removed
- Adjusting assumptions for taxpayer behavior for FY 2015 using accounting data

Updated LFD Estimate

- Key differences: HJ 2
 - RTIC adjustments
 - Lower oil prices
- Key differences: January LFD
 - Lower oil prices
 - Higher insurance tax forecast due to new data
 - Lower Property tax forecast due to new reappraisal data
 - Slightly lower wage estimate offset by growing from base in the conversion for FY 2015
 - Modeling changes discussed in Subcommittee, including unbiasing the Corporation tax model



Probabilities

- Predictability of Montana Revenues is less than most states
- Historical growth pattern in times of oil price decline
- Probability
 - FY 2015 informed by Accounting data
 - FY 2016 and 2017 better informed by Economic data